

more plentiful. The Iroquois canoe is everywhere stated to have been heavy and loggy, inconvenient for portaging and short-lived generally. In fact, so poor a craft it was in comparison with that of the Algonkians, that the Iroquois are said to have traded eagerly for the lighter and more substantial contrivance.¹

Bark and skin-covered canoes, however, are not the only craft which have been used by Canadian Indians, since at least two other devices—usually constructed in a very primitive style—are found side by side with considerable advancement in navigation. The dugout, for instance, which is usually little more than a hollowed-out log, is employed by a great many tribes along with canoes of a much superior kind. Another very primitive-appearing contrivance, the raft, is distributed quite widely, though employed to a greater extent in some areas than in others.

It may be unnecessary, or even impossible, for us to decide which of the foregoing came into use first, but we should certainly be quite near the mark in placing the raft first in degree of simplicity, with the simpler class of dugout next.

THE BIRCH-BARK CANOE.

Practically everywhere within the region of Algonkian influence proper the birch-bark canoe was essentially the same, such differences as occur concerning mostly the shape of bow and stern, which has evidently been derived almost exclusively from a single pattern, with local variations in the amount of curvature or recurvature and the method of decking over at the ends, where such a device was employed. The Malecite (western New Brunswick) and Ojibwa forms are very good examples of the extremes in outline in the Algonkian region. The Malecite canoe also exhibits the decking-over sheet at the ends, with side-flaps, in a well-developed form. As we proceed westward, this sheet decreases in size in the Algonquin canoe of northern Quebec and Ontario and becomes vestigial in a smaller form used by certain of the neighboring Ojibwa. The same purpose, that of preventing the inflow of water, is accomplished by the recurring ends of the Ojibwa type with which we are most familiar.

Regarding the Algonkian tribes of central Labrador, Turner remarks that "a tribe of great dissimilarity between the Naskopies and the Little Whale River Indians (Eastern Cree) is that the

birch-bark canoe of the latter is much more turned up at each end, producing a craft well adapted to the swift currents of rivers." He also states that "the occupants are skilful boatmen," that "sails are sometimes erected in a single canoe," and that "at times two canoes are lashed together and a sail spread from a single mast."²

An offshoot of the Algonkian canoe was the "rabiscaw" of the Hudson Bay Company, an extra large birch-bark craft designed to meet the demands of the fur-trade. A prominent feature was the high, upturned bow and stern decorated with gaudy designs.

At the western extremity of the bark canoe area we find at least two somewhat divergent forms which suggest an attenuation of eastern accultural influence, combined, possibly, with modifications from other sources. The Dog-ribs, an Athabaskan tribe of the Mackenzie basin, like the Ojibwa, construct a birch-bark canoe having separate keel-pieces for the bow and stern. The small and narrow ribs and the slender, widely-separated siding or flooring strips extending from end to end, however, show some resemblance to kayak construction. A special feature (also showing a resemblance to the kayak)³ is the fairly extensive sheet of decking at either end. Conspicuous side-flaps, of the type found in the Algonquin decking, are lacking. The seams are sewn with spruce root and gummed.

Among the Kootenay and the various Salish tribes of southern British Columbia is found a canoe of pine or spruce bark, rather rude in general workmanship and showing but little external resemblance to eastern forms. The most striking feature is the peculiar pointed extension of the lower part of bow and stern, which is said to be specially adapted to rapid rivers. From a structural point of view no radical difference from eastern types is to be noted. The bark of the yellow cedar (*Thuja excelsa*) is also mentioned as a British Columbia canoe-making material.

A Slave canoe from the neighborhood of Hay river (flowing into Great Slave Lake) exhibits an upward extension at the bow and stern which adds much to its picturesqueness. In other respects it conforms closely to eastern models.

A description of Ojibwa canoe-making will no doubt give a fair idea of the methods employed throughout most of the bark canoe area.⁴ The process is most interesting and requires considerable skill.

¹Turner, Lucien M., "Ethnology of the Ungava District," 11th Annual Rept. of the Bureau of Ethn., Washington, D.C., p. 182.

²Mention of this resemblance is made by Pettit, in "Autour du Grand Lac des Esclaves," p. 268.

³From data obtained by the writer among the Saulteaux, or Ojibwa of the Lake Nipigon region. Permission to use this and other original notes was accorded by the Geological Survey, Ottawa.

⁴Dr. E. Sapir, in "Time Perspective in Aboriginal American Culture," Memoir 99, of the Geological Survey (Canada), p. 29, remarks: "Similarly, the clumsy elm-bark canoe of the Iroquois seems less adapted to its cultural environment than the various types of birch-bark canoe of their Algonkian neighbors. We may risk the guess that the Iroquois bark canoe is an imperfect copy in elm-bark, a characteristically Iroquois material, of the superior Algonkian types, and connect this further with the general consideration that the Iroquois were rather more inclined to be cross-country walkers than the neighboring Algonkian tribes, who